



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,889	05/29/2001	Joseph J. Ervin	P5817	5576

21127 7590 11/26/2003

KUDIRKA & JOBSE, LLP
ONE STATE STREET
SUITE 800
BOSTON, MA 02109

EXAMINER

DANG, KHANH NMN

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 11/26/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,899

Applicant(s)

BAUMANN ET AL.

Examiner

Khanh Dang

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-38 is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Specification

In the specification, page 7, line 14, the status of the incorporated US Application must be updated.

Claim Rejections - 35 USC § 112

Claims 1-9 and 10-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-9 are directed to an apparatus. However, the essential structural cooperative relationship(s) between elements in the claims have been omitted, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. Also, in claim 1, line 1, "Bridge" should be changed to – A bridge --.

Claims 10-19 are directed to an apparatus. However, the essential structural cooperative relationship(s) between elements in the claims have been omitted, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. Also, in claim 10, line 1, "Bi-directional" should be changed to – A bi-directional --.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2181

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7, 20-22, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Schutte.

At the outset, it is noted that similar will be grouped together to avoid repetition in explanation.

As broadly drafted, these claims do not define any structure that differs from Schutte. With regard to claim 1, Schutte disclose a bridge apparatus for connecting a first multimaster bus I2C (12a) environment to a second multimaster bus I2C (12b) environment, comprising an address bitmap (address of stations 10 defined for the I2C bus) having a value associated with each possible I2C address; a port-A interface (conductors/interface on the upstream of bridge 14) that receives address signals and data signals from the first multimaster and transmits data signals to the first multimaster bus (12a); a port-B interface (conductors/interface on the downstream of bridge 14) that transmits address signals and data signals to the second multimaster bus (12b) and received data signals from the second multimaster bus; and a controller (bridge 14) that selectively passes an address and data received on the port-A interface from the first multimaster bus to the port-B interface for transmission on the second multimaster bus depending on the address bitmap value associated with the address.

With regard to claim 2, the controller (14) comprises a command interpreter (including at least CRT, BT and 148) that receives commands at the port-A interface (conductors/interface upstream of 14) from the first multimaster bus (12a) and controls the operation of the bridge apparatus in response to received commands.

With regard to claim 3, a tunnel command received by the bridge apparatus includes a tunnel address (station address) and the controller (14) passes the tunnel address to the port-B interface (conductors/interface downstream of 14) for transmission on the second multimaster bus (12b). See also Fig. 1 and description thereof.

With regard to claim 7, it is clear that the controller (14) is a programmed Microcontroller so that it can recognize the ID address of the stations.

With regard to claims 20-22, and 26, it is clear that one using the device of Schutte would have performed the same steps set forth in claims 20-22, and 26.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ervin et al.

Ervin et al. discloses the claimed invention including the use of a bridge apparatus having an address bitmap (see Fig. 4 and description thereof) having a value

Art Unit: 2181

associated with each possible I2C address; a port-A interface (308); a port-B interface (314); a controller (301); and a plurality of registers (see Fig. 4 and description thereof). However, Ervin does not disclose that the first I2C bus (comprising 306 and 310) is a multimaster bus. The acknowledged prior art (discussed in Background of the Invention) discloses that it is well-known in the art to use more than one master on an I2C bus. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use more than one master on the I2C bus of Ervin et al., since using more than one master on an I2C is old and well-known (as evidenced from at least the acknowledged prior art), and only involves only routine skill in the art.

Allowable Subject Matter

Claims 29-38 are allowed.

Claims 10-19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

US Patent No. 5,341,480 to Wasserman et al. and 6,233,635 to Son are cited as relevant art.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.



Khanh Dang
Primary Examiner